

# TECHNICAL DATA SHEET FOR PROFESSIONAL CONTRACTOR USE ONLY

# GC ULTRA-SHIELD 7700 ALIPHATIC, POLYASPARTIC WINE TANK TOPCOAT - SPRAY

**ULTRA-SHEILD 7700** is an environmentally-friendly, exterior grade, aliphatic polyaspartic topcoat with excellent resistance to mold, fungus, and mildew growth. Ultra-Shield 7700 is a durable, quick-curing, abrasion-resistant, color-stable film with excellent weatherability.

Ultra-Sheild 7700 is designed as a plural component (1:1 by volume) static mix, spray grade top coat for vertical installation over aromatic polyurea and polyurethane substrates.

Ultra-Shield 7700 offers excellent chemical resistance against ethanol vapors and wine alcohol. It also provides superior long term protection for exterior storage tanks in wine production facilities.

Meets California VOC and AQMD requirements, including SCAQMD areas.

## RECOMMENDED USES

Wine Tanks and Chillers

Cold Storage

Steel

Polyurea

Polyurethane

## **PACKAGING**

2-gallon kit: A-Side 1 gallon and B-Side 1 gallon

10-gallon kit: A-Side 5 gallon and B-Side 5 gallon (non-stock item)

## **COLOR**

Clear, Tan, and White

Custom colors are available. Minimum order: 100 gallons.

## **TECHNICAL DATA**

PHYSICAL PROPERTIES		
Property	Test Method	Ultra-Shield 7700
Total Solids by Weight	ASTM D2669	90 ± 2%
Total Solids by Volume	ASTM D2697	91 ± 2%
Specific Gravity		Side A: 1.14 ± 0.1 Side B: 1.06 ± 0.1
Viscosity at 75°F (24°C), Side A Side B		300 ± 100 cps 1000 ± 300 cps
Dry Film Thickness per Coat		15 ± 2 mils
Tear Resistance	ASTM D624	600 ± 50 pli
Tensile Strength	ASTM D412	5500 ± 200 psi
Hardness	ASTM D2240	65 ± 5 Shore D
Ultimate Elongation	ASTM D412	25 ± 00%
Volatile Organic Compounds	ASTM D2369-81	<0.42 lb/gal <50 gm/liters

## **EQUIPMENT**

Ultra-Shield 7700, when using a machine mixer, requires a Graco Xtreme 1:1 by-volume proportioner with remote manifold, and static mix tube connected to a minimum of a 50 foot airless hose and gun.

Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

## **COVERAGE**

The first coat of Ultra-Shield 7700 should be applied at the rate of 1 gallon/100 square feet or 100 sqft/gallon.

COVERAGE RATE		
Property	Value	
Coverage	1 mil thickness is one gallon per 1460 sqft.	
Application Rate	8 to 12 DFT mils	
Performance, 10 years	15 to 24 DFT mils	
Cure Time	3 to 4 hours	
Pot Life	10 to 15 minutes	
Final Cure	24 to 48 hours	
Service Temperature	0°F to 200°F (-17°C to 93°C)	

The information contained herein is for purposes of identifying the product and does not constitute a warranty that the product will conform to that description.

### APPLICATION

Ultra-Shield 7700 should be applied at a minimum film thickness of 5 mils. It should be noted that the heavier the application, the longer the curing process takes.

Apply Ultra-Shield 7700 evenly over the entire deck. For best results, use an airless sprayer. A phenolic resin core roller may be used, but extra care should be taken not to cause air bubbles.

At 75°F (24°C) and 50% relative humidity, allow each coat to cure 3-4 hours. Cure time will vary depending on temperature and humidity. Allow 6 hours before permitting light pedestrian traffic and at least 24-48 hours before permitting heavy pedestrian traffic onto the finished surface. Uncured Ultra-Sheild 7700 is very sensitive to heat and moisture. Higher temperatures and/or high humidity will accelerate the cure time. Use caution in batch sizes and thickness of application. If more than 48 hours passes between coats, re-prime the surface with Ultra-Bond U before proceeding. Low temperature and/or low humidity extend the cure time.

## SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion. Refer to the product's Guide Specifications for detailed surface preparation information. Minimum recommended surface preparation:

Atmospheric: SSPC-SP6/NACE 3, 2 mils 50 microns) profile required.

Concrete & Masonry: (SSPC-SP13/NACE 6 or ICRI, No. 310.2 CSP 3-5. Primer.

#### MIXING

Ultra-Sheild 7700 may not be diluted under any circumstance. Proportions are premeasured. Ultra-Sheild 7700 Side-A and Side-B should be mixed individually before combining. Add Side-B to Side A while mixing, using a mechanical mixer at medium speed. Mix until a homogeneous mixture and color is obtained (at least 5 minutes) and mix frequently during application to maintain uniform color. Do not thin.

Do not mix in an up and down motion. Use care to scrape the sides of the container to ensure that no unmixed material remains.

Use caution not to whip air into the material as this may result in pinhole blisters and/or shortened pot life. Do not mix any material that cannot be used within 20-30 minutes.

## PERSONAL PROTECTIVE EQUIPMENT

Since Ultra-Sheild 7700 is atomized into a very fine particle distribution during spray application, it is essential that maximum effort is made to protect the spray mechanic and others near the workplace from undue exposure.

## **JOB-SITE PROTECTION**

Overspray from Ultra-Sheild 7700 can carry considerable distances and attention should be given to the following:

- 1. Post warning signs a minimum of 100 feet from the work area.
- 2. Cover all intake vents near the work area.
- 3. Minimize or exclude all personnel not directly involved with the spray application.
- 4. No welding, smoking or open flames.
- 5. Have  $CO_2$  or another dry chemical fire extinguisher available at the jobsite.
- 6. Provide adequate ventilation.

### STORAGE AND SHELF LIFE

Ultra-Sheild 7700 has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C). Keep containers closed and store in a dry, cool place away from direct sunlight, heat, sparks, open flame, and moisture.

## FREIGHT CLASSIFICATION

DOT: Paint Flammable Liquid UN 1263.



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#### **HEALTH AND SAFETY**

GCMC is committed to the health and safety of our customers. GCMC products shall only be installed by certified contractors. Applicators are required to follow all proper handling, safety and installation procedures. Safety Data Sheets (SDS) are available on this product. Any individual who may come in contact with these products should read and understand the SDS. Ultra-Sheild 7700 should not be applied when the wind is of sufficient velocity to cause overspray of adjacent areas, buildings or people.

#### VAPOR INHALATION

The best form of protection against organic solvents or potentially sensitizing vapors in the workplace is a fresh air supply. Numerous manufacturers, including the 3M Company and MSA, make full-face fresh air masks. For maximum protection, we recommend use of NIOSH/ MSHA approved self-contained breathing apparatus with a full-face piece operated in a positive pressure mode. In well-ventilated application conditions, the use of Type-C organic vapor cartridge respirators is acceptable. Effects of overexposure to vapor are characterized by nasal and respiratory irritation, dizziness, nausea, headache, fatigue, possible unconsciousness or even asphyxiation. Vapor inhalation problems are characterized by coughing, shortening of breath and tightness in the chest. Anyone exhibiting these types of symptoms should be immediately removed from the workplace and administered oxygen or fresh air. If the condition is prolonged or extreme, SUMMON EMERGENCY TRAINED MEDICAL ATTENTION IMMEDIATELY.

#### SKIN CONTACT

To prevent excessive skin contact with the sprayed product, we recommend use of fabric coveralls, and neoprene or other resistant gloves. Skin contact with liquid components can result in a rash or other irritation. Wash the affected skin area with water. Wipe residual liquid from the skin with a clean cloth, then wipe the affected area with 30% solution of rubbing alcohol. Follow the alcohol wipe with repeated washings with soap and water. If a rash or other irritation develops, see a physician.

#### **EYE CONTACT**

Wear a full-face mask or OSHA-approved protective goggles. Eye Contact with liquid or sprayed components can result in corneal burns or abrasions. Upon exposure, eyes should be flushed with water for an extensive period. SUMMON EMERGENCY TRAINED MEDICAL ATTENTION IMMEDIATELY.

#### **TECHNICAL SERVICES**

Additional information, such as brochures, technical assistance, and other services are also available from a General Coatings Manufacturing Corp. Technical Consultant.

LIMITED WARRANTY. We warrant our Products to be free of manufacturing defects and to comply with the Product's current published physical properties when tested under controlled conditions. Our sole responsibility is limited to replacement of that portion of any Products found to be defective at the time of manufacture. There are no other warranties of any nature whatsoever, whether expressed or implied, including an express disclaimer of any warranty of merchantability or fitness for a particular purpose. Further, we disclaim any liability for damages of any type, however caused, including remote, consequential damages, or special damages resulting from any theory of liability, whether based on tort, negligence, or strict liability. We disclaim responsibility for any claims of intellectual property infringement through use of our Products in any manner. Where Products are used as a waterproofing membrane or floor coating, no warranty or guarantee is issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, abnormal wear and tear, or improper application by the applicator. Damage caused by abuse, neglect, lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded. In all instances and as a pre-condition to any available remedy, we reserve the right to conduct sample testing and performance analysis on any materials claimed to be defective, performed prior to any repairs being made by owner, general contractor, or applicator. Our limited warranty is void if repairs have been made or attempted, or if the claimed defect has been adulterated prior to our ability to conduct a formal investigative analysis.

DISCLAIMER: Please read all information in the general guidelines, technical data sheets, application guide and safety data sheets (SDS) before applying material. Products are for professional use only and should only be applied by professionals who have prior experience with our Products or have undergone specific training in their proper application. Published technical data and instructions are subject to change without notice. Contact your local representative or visit our website for current technical data and instructions. All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of these tests are not guaranteed and are not to be construed as a warranty, either expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with any product. It is the user's responsibility to satisfy himself, by his own information and tests, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his own use of the product. We do not suggest or guarantee that any hazards listed herein are the only ones that may exist. We are not liable to the purchaser, end-user, or any third party for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, our Products. Recommendations or statements, whether verbal or in writing, shall not be binding upon us unless in writing and signed by one of our authorized corporate officers. Technical and application information is provided for establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and we make no claim that these tests or any other tests, accurately represent all environments. We are not responsible for typographical errors. © General Coatings Manufacturing Corporation. All Rights Re